

ABSTRACT

To provide a multilayer ceramic capacitor which has capacitance-temperature characteristics satisfying the X8R characteristic specified by the EIA standard and has capacitance with an excellent long-term stability.

The object is achieved by a multilayer ceramic capacitor comprising a laminate including alternately stacked dielectric layers of a sintered compact composed of crystal particles of a dielectric porcelain composite and internal-electrode layers. The dielectric porcelain composite comprises a primary constituent containing barium titanate; a first accessory constituent composed of at least one of MgO, CaO, BaO, and SrO; a second accessory constituent containing silicon oxide as a major constituent; a third accessory constituent composed of at least one of V_2O_5 , MoO_3 , and WO_3 ; a fourth accessory constituent composed of an oxide of R1 (wherein R1 is at least one of Sc, Er, Tm, Yb, and Lu); a fifth accessory constituent composed of $CaZrO_3$ or a combination of CaO and ZrO_2 ; and a sixth accessory constituent composed of an oxide of R2 (wherein R2 is at least one of Y, Dy, Ho, Tb, Gd, and Eu). In the case of 100 moles of barium titanate, there are 0.1 to 3 moles of the first accessory constituent, 2 to 10 moles of the second accessory constituent, 0.01 to 0.5 moles of the third accessory constituent, 0.5 to 7 moles of the fourth accessory constituent (wherein the number of moles of the fourth accessory constituent is that of R1 alone), more than 0 but not more than 5 moles of the fifth accessory constituent, and more than 0 but not more than 9 moles of the sixth accessory constituent. The crystal particles constituting the dielectric layers have an average particle diameter of not less than 0.2 μm and less than or equal to 0.55 μm .